United Nations

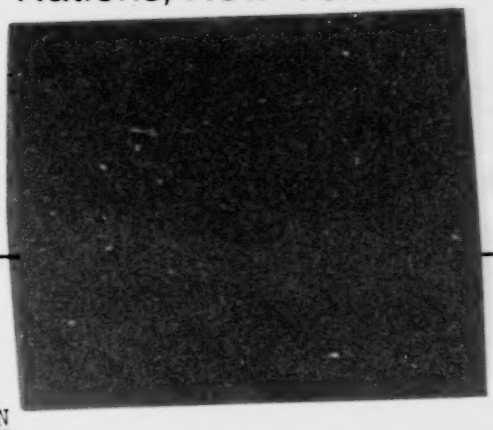
Press Release

Department of Public Information
Press Section
United Nations, New York

DPI/658

DISARMAMENT FACT SHEETS

Prepared by the Centre for Disarmament in cooperation with the Information Service, United Nations Office at Geneva.



Fact Sheet No. 6 DPI/658

NUCLEAR TEST BAN

For two decades the General Assembly has urged that all nuclear weapon tests be stopped. This would be in the interest of mankind, the Assembly said in 1978, "both as a major step towards ending the qualitative improvement, development and proliferation of nuclear weapons and as a means of relieving the deep apprehension concerning the harmful consequences of radioactive contamination for the health of present and future generations".

Test Figures: Only two atomic bombs were used in war, but more than 1,000 nuclear weapon tests have been carried out since then. According to the Stockholm International Peace Research Institute (SIPRI), which has counted "known and presumed" tests since 1945, the totals up to the end of 1978 were: United States, 636 tests since 1945; USSR, 398 tests since 1949; United Kingdom, 29 since 1952; France, 76 since 1960; China, 25 since 1964.

The total estimated by SIPRI (1,164) includes a small number of explosions for peaceful purposes (such as excavation or mineral extraction). India conducted what it termed a "peaceful nuclear explosion experiment" in 1974.

Early Concerns: The hazardous radioactive fallout from atmospheric tests caused mounting worry in the 1950s as the world learned of the spread of radioactive nuclides such as strontium-90, caesium-137 and iodine-131, and of mechanisms transferring these substances to body tissues through the food chain -- such as in milk from cows fed on grass contaminated by radioactive rain.

The UN Scientific Committee on the Effects of Atomic Radiation, established by the Assembly in 1955, said that as there were no effective measures to prevent the occurrence of harmful effects of global radioactive contamination from nuclear explosions, the achievement of a final cessation of nuclear tests would benefit present and future generations of mankind.

For information media – not an official record

Partial Test Ban: The United States, United Kingdom and USSR started negotiations on a test ban in 1958. The two sides were unable to agree on the question of providing for adequate verification of underground tests. The Assembly urged them in 1962 to agree on a partial ban if a comprehensive treaty was not possible.

The Partial Test Ban Treaty was signed in 1963 by the three nuclear-weapon Powers involved in the negotiations. They agreed not to conduct any nuclear weapon tests or other nuclear explosions "(a) in the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas; or (b) in any environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted".

The preamble to the Treaty stated that the Parties were determined to continue negotiations to achieve "the discontinuance of all test explosions of nuclear weapons for all time".

Testing since 1963: Since the Partial Test Ban Treaty, the US, United Kingdom and USSR have conducted tests exclusively underground. France and China, not Parties to the Treaty, continued to conduct tests in the atmosphere, but France announced in 1974 that it was ending its atmospheric tests.

China and France reiterated their positions when the matter was discussed at the 1977 Assembly session. China said it was compelled to conduct limited nuclear tests and develop nuclear weapons entirely for the purposes of self-defence, and that it would be ready to halt such tests only when the two major-nuclear-weapon Powers and all nuclear countries completely prohibited and thoroughly destroyed their nuclear weapons. France stated that cessation of nuclear-weapon tests was not an effective disarmament measure because it would not lead to any reduction in the volume of existing nuclear weapons or even interrupt the development of current and future arms programmes.

Further Agreements: Although underground tests have not ended, the US and Soviet Union have signed two bilateral agreements limiting the size of underground explosions. The Threshhold Test Ban Treaty of 1974 prohibits underground nuclear weapons tests above 150 kilotons. The same limit was set by the Peaceful Nuclear Explosions Treaty, signed in 1976, for individual underground explosions in that category. The agreements also provide for exchange of information and, in certain cases, access to sites of explosions.

Current Negotiations: The US, United Kingdom and USSR began a new round of negotiations on a comprehensive test ban in 1977. At its special session devoted to disarmament, the Assembly said these negotiations on "a treaty prohibiting nuclear-weapon tests, and a protocol covering nuclear explosions for peaceful purposes, which would be an integral part of the treaty", should be concluded urgently. Results of the three-Power negotiations should be considered by the Committee on Disarmament, the Assembly said, with a view to submission of a draft treaty "at the earliest possible date".

In July 1979, the three States engaged in negotiations reported to the Committee on Disarmament that a large measure of agreement had been reached. Details on the verification arrangements and other points were still being negotiated.

Verification Issue: There was no major problem concerning the verification issue relating to tests in the atmosphere or under water, since such tests were detectable by national technical means. With regard to underground tests, however, a key issue continued to be whether it is possible not only to detect the seismic waves produced by underground explosions but also to distinguish them from earthquakes. The Soviet Union maintained that any suspected violation could be adequately verified by "national means" combined with such international measures as the exchange of data on seismic events, rather than "on-site" inspections. The United States view was that on-site inspections remained essential to identify events of a relatively low magnitude, despite considerable progress in identifying seismic events.

In 1976 the USSR submitted a revised draft treaty which included a provision for the possibility of on-site inspection by invitation: If "appropriate grounds" are cited in support of the need for such an inspection, a State Party which may be the object of doubts regarding its compliance "may take a favourable position regarding the carrying out of an inspection in its territory, provided it finds the grounds convincing, or it may take another decision". The US welcomed this proposal as a positive development.

In their report to the Committee on Disarmament in July 1979, the US, USSR and United Kingdom said they had agreed on the main elements of verification; the treaty should provide for verification by national technical means and for the possibility of on-site inspection, they stated. Negotiations were still proceeding on the detailed arrangements, involving many technical issues that required time to negotiate.

The detection and identification of seismic events is being studied by the Committee on Disarmament. Its expert group on seismic detection has proposed establishing a global network of about 50 seismic observatories, and international data centres for processing of the information. The group is developing methods for experimental testing of the proposed seismic network. The US, United Kingdom and USSR have agreed that exchange of seismic data would be an important part of verification.

The Assembly's Appeal: Gravely concerned over the fact that nuclear-weapon testing "has continued unabated against the wishes of the overwhelming majority of Member States", the Assembly called again for a test ban in 1978. It urged the drafting of a treaty "as a matter of the highest priority".

Pending the conclusion of a comprehensive test ban treaty, the Assembly called on all States "to refrain from conducting any testing of nuclear weapons and other nuclear explosive devices".

-o-

October 1979.